

The Tables below summarize the Actions proposed by Management in its Report and Recommendations. Table A includes actions that address the Panel's findings of noncompliance and aim to bring the project into compliance. Table B includes actions based on observations shared by the Panel that aim to improve project implementation, but are not related to compliance.

<b>TABLE A - Summary of Compliance-Related Findings by the Panel and Actions by Management</b>			
<b>Issues</b>	<b>Panel findings</b>	<b>World Bank Management Response</b>	
		Actions	Timeline
<b>Water Loss</b> (Section IV B of the Management Response)	The Panel finds that Management complied with OP/BP 4.01 by undertaking baseline studies for village water sources and planning. However, the Panel finds that the Bank did not identify adequate mitigation measures if a water source is lost, in non-compliance with OP/BP 4.01.	THDC conducts regular monitoring surveys of the 66 water sources, using both videography and flow measurement. If a water source dries up, THDC will design a replacement, in coordination with the affected villages, based on options including the following: (i) new gravity-fed water supply systems; (ii) reservoirs or cisterns for village bulk supply, filled either by diverting flow from a nearby stream, by pumping water from another source or by water trucks; or (iii) rechanneling the water source.	Every six months (12/2014, 6/2015, 12/2015, 6/2016, 12/2016, etc.) in the course of regular implementation support missions.
		Management will monitor the evolution of the water sources, and, if a water source dries up, assess the proposed replacement option, and supervise the implementation of works. The team will include water and sanitation specialists.	Midterm review scheduled for June 2017.
<b>Resettlement and Livelihood Restoration</b> (Section IV E of the Management Response)	With respect to Hatsari, the Panel found that the Project Resettlement Action Plan (RAP) does not adequately assess the Hatsari reality, in non-compliance with OP/BP 4.12 on Involuntary Resettlement. The Panel recognizes, however, Management's concern for the Hatsari issue to date and the fact that negotiations are still continuing with a wide range of options on offer to Hatsari residents.	THDC has put in place a plan to address the issue of the Hatsari families. Two safeguard-compliant options (one for temporary relocation and the other option for permanent relocation) are available to the project affected families. THDC is waiting to see which option the families choose. Every three months, THDC will meet with the Hatsari families to review their selection. If selection is made, THDC will work with the family to implement it	Every six months (12/2014, 6/2015, 12/2015, 6/2016, 12/2016, etc.) in the course of regular implementation support missions.
		Management will monitor if the Hatsari families have made a selection. If a selection has been made, Management will review the implementation of the resettlement option.	Midterm review scheduled for June 2017.

**TABLE B - Observations Presented by the Panel report and Actions by Management**

Issues	Panel findings	World Bank Management Response	
		Actions	Timeline
<p><b>Cumulative Impacts</b> (Section IV A of Management Response)</p>	<p>The Panel finds that Management complied with the provisions of OP/BP 4.01 by ensuring the preparation of a cumulative impact assessment for the Project and by incorporating the increased minimum environmental flow (e-flow) into the project to mitigate cultural, religious and biodiversity impacts. The panel notes that the project documents do not address the proposed transmission line.</p>	<p>Management will continue to pursue policy dialogue on river basin management issues with the Government of India and with concerned States.</p> <p>Management reports that significant progress has been made since the preparation of the environmental impact assessment for the transmission line. It is now envisaged that (i) the State Transmission Utility (PTCUL) will erect the transmission line corridor to evacuate power generated by VPHEP from Pipalkoti (Kuwari Pass) to Srinagar, and from Srinagar to the Uttarakhand state border near Kashipur; and (ii) the Central Transmission Utility, Power Grid Corporation of India (POWERGRID or PGCIL), will connect the transmission line corridor to the national grid. As CEA, PTCUL and POWERGRID have functioning mechanisms for planning and coordination, the design and construction will follow well-tested environmental and social policy and procedures of POWERGRID. Management will build on these plans to ensure that they are properly implemented and any impacts are adequately mitigated.</p> <p>During regular supervision missions, Management will review progress on planning, construction and commissioning of the transmission line. Management will also coordinate with THDC, POWERGRID, and CEA to ensure that the transmission line impacts are adequately mitigated.</p>	<p>Every six months (12/2014, 6/2015, 12/2015, 6/2016, 12/2016, etc.) in the course of regular implementation support missions.</p> <p>Midterm review scheduled for June 2017.</p>
<p><b>Risk relating to structures, landslides and earthquake</b> (Section IV C of Management Response)</p>	<p>The Panel notes the steps taken to use TBM technology to reduce potential harms from vibrations. The Panel finds that this complies with Bank Policy OP/BP 4.01 as a step to reduce or mitigate potential harm. The Panel finds that, in compliance with</p>	<p>Under the adaptive management approach adopted by VPHEP, the selected civil works contractor has agreed to establish a systematic protocol, under the supervision of THDC and independent Third Party Monitoring Consultants, to regularly test slurry to identify any heavy metal or hazardous substances and to treat the slurry as needed before disposal.</p> <p>During the regular supervision missions, Management will ensure that THDC and the civil works contractor will analyse the composition of the slurry and take appropriate measures to remove harmful particles or substances before disposal.</p>	<p>Every six months (12/2014, 6/2015, 12/2015, 6/2016, 12/2016, etc.) in the course of regular implementation support</p>

	OP/BP 4.37, Management took adequate measures to ensure the preparation of relevant studies by THDC during project design, appraisal and implementation stages to mitigate the risks raised in the Request.		missions.  Midterm review scheduled for June 2017.
<b>Risk to aquatic life and ecology from altered flow and sediment release.</b> (Section IV D of the Management Response)	The Panel finds the project to be in compliance with OP/BP 4.01 with respect to the project's impacts on fish and aquatic fauna, but finds that the analysis of the bedload issue is lacking and believes it may be necessary to study this issue further.	To assess bedload movement, THDC has conducted thorough silt management studies and has designed a silt management system. In addition, a real time flood forecasting system is planned to be installed in the catchment area of VPHEP. Finally, a CAT plan will be implemented over the next 5 years in the catchment of the river up to the project area, with the objective of preventing sediment generation.	Every six months (12/2014, 6/2015, 12/2015, 6/2016, 12/2016, etc.) in the course of regular implementation support missions.  Midterm review scheduled for June 2017
		In the event of a major bedload movement, several physical measures are in place to limit its impact on the VPHEP as detailed in paras 37-40 of the management response. During plant operation THDC plans to carry out reservoir flushing about four times per year to increase reservoir storage capacity.	
		Management is recruiting an independent expert to conduct a Remote Sensing review of the upper catchment of the Alaknanda River to assess risk of Glacial Lake Outburst Floods. Once completed, the study will further inform the assessment of VPHEP preparedness for such extreme events as well as the preparation of the dam and plant operations manual.	
<b>Gender Impacts</b> (Section IV F of the Management Response)	The Panel finds that the THDC Resettlement and Rehabilitation (R&R) Policy complies with OP/BP 4.01 and OP/BP 4.12. The panel finds that insufficient attention was given to the issue of women's security. A key issue will be regular monitoring of the labor camps with	With regard to women's security, the civil works contractor is contractually obligated to undertake measures aimed at securing the safety of women living in villages around the labor camps. The contractor will house workers in two fenced camps to minimize their impacts on local resources and communities. The contract contains specific clauses to ensure that these camps have facilities for water supply, liquefied petroleum gas for cooking, toilets, and solid and liquid waste management. The labor force will not be allowed to access community forests so as to ensure the safety of local women collecting fuel and fodder there. The following actions have been agreed by the civil works contractor and will be monitored (gender-differentiated monitoring) during	Every six months (12/2014, 6/2015, 12/2015, 6/2016, 12/2016, etc.) in the course of regular implementation support missions.

	<p>regard to women's security and of gender-differentiated impacts of the project.</p>	<p>project implementation:</p> <ul style="list-style-type: none"> <li>• Contractor will hire women staff as security officers and guards.</li> <li>• Contractor and THDC will conduct regular awareness campaigns in the labor camps about women's safety and to reinforce project boundaries, with penalties for violation of the same (to be borne by contractors and workers alike) and availability of criminal prosecution.</li> </ul> <p>THDC will deploy women social mobilizers in each of the affected villages throughout the construction period.</p> <p>The GRM will be gender-sensitive (at least a third of the members will be women and THDC will provide the GRM members specific training on gender issues). THDC will conduct a campaign to let women know that there are dedicated conduits to file complaints about workers' behaviors and other possible threats.</p> <p>During the regular supervision missions, Management will review the performance of THDC, and of the contractors, on gender issues. Management team will include gender specialists.</p>	<p>Midterm review scheduled for June 2017</p>
<p><b>Local Benefit Sharing</b> (Section IV G of the Management Response)</p>	<p>The panel finds that the provisions of OP/BP 4.12 relating to an appropriate grievance mechanism have been met, but notes the need for clarity on the use of royalty payments to the State and benefit sharing with project affected villages.</p>	<p>The developer provides 12 percent free power to the host State, and the revenue generated from this power will be used for host state development. An additional 1 percent of revenue collected will go directly to the project area, following the guidelines issued by the Ministry of Power in October 2013. The money will be directly deposited by the developer in the LADF and a 1 percent matching grant will be provided by the state government. The State of Uttarakhand will determine the details of the mechanism that will govern the use of these funds.</p> <p>Going forward, the following activities will be implemented:</p> <ul style="list-style-type: none"> <li>• THDC will carry out evaluation of host villages (if any, other than Ghedora) by December 31, 2014 to establish baseline.</li> <li>• The end-term evaluation of RAP implementation will also cover the impact evaluation for the host villages.</li> </ul> <p>The GRC will be made more accessible by holding</p>	<p>Every six months (12/2014, 6/2015, 12/2015, 6/2016, 12/2016, etc.) in the course of regular implementation support missions.</p> <p>Midterm review scheduled for June 2017.</p>

		<p>GRC meetings in each of the affected villages, whenever possible.</p>	
		<p>During the regular supervision missions, Management will review the performance of THDC, and of the GRC. Management team is adequately staffed with social development specialists.</p>	